



Effects of Almond Fert. Programs on Soil Nutrient Levels

Bisabri Ag Research Consulting, Westley, CA 2018-2020

Experiment Info:	
Planted:	2/1/2008
Harvest:	8/14/2020
Yield Goal:	2500
Target Fert.:	
Variety:	Nonpariel
Population:	148
Row Width:	
Prev. Crop:	Almonds
Plot Size:	
Replications:	

Soil Test Values (ppm):	
pH:	
CEC:	
%OM:	
Bray P1:	
Bicarb P:	
K:	
S:	
%K:	
%Mg:	
%Ca:	
%H:	
Zn:	
Mn:	
B:	

Objective:

Determine the effects of a lower P and K applications volumes with AgroLiquid on soil nutrient levels compared to those of conventional programs

The yields for AgroLiquid program of PrG/potassium thiosulfate, PrG/Kalibrate have out yielded the grower standard of 10-34-0/potassium thiosulfate, the PrG/potassium thiosulfate applied 16% less gallons to the acre than the grower standard, and the PrG/Kalibrate was 64% less applied gallons than the grower standard. After 3 years what are the soil nutrient levels comparing each program. Would using lower rates and producing high yields mine nutrients from the soil that were not being replaced. The following chart shows that after 3 years the nutrient level in the soil is the same or better than all the other programs in comparison.

Almond soil sample collected 11/18/20

	pH	CEC	Matter	Base Saturation				N	P	K
				CA	Mg	K	Na			
1 Block 1 10-34-0	6.60	22.80	2.20	64.20	23.80	2.60	3.30	1.00	33.00	235.00
2 Block 2 Struc KTS	5.90	23.00	3.00	49.90	26.80	3.00	3.40	1.00	64.00	269.00
3 Block 3 PrG KTS	5.90	24.90	2.70	51.80	23.90	3.40	3.90	1.00	42.00	330.00
4 Block 4 PrG Kalib	6.00	25.70	2.30	53.20	25.10	2.20	4.50	2.00	30.00	218.00

	Mg	CA	Na	S	Z	Mn	Fe	Cu	B
1 Block 1 10-34-0	661.00	#####	#####	277.00	0.70	5.00	6.00	3.10	2.10
2 Block 2 Struc KTS	749.00	#####	#####	28.00	2.30	13.00	17.00	7.00	1.20
3 Block 3 PrG KTS	722.00	#####	#####	92.00	1.60	9.00	13.00	6.60	1.60
4 Block 4 PrG Kalib	787.00	#####	#####	62.00	1.30	7.00	8.00	5.30	1.70

Analysis by A & L Western Agricultural Lab
Note that 1-4 have 9% EDTA Zinc

Conclusions:

- Note: See the yield report for description of treatments and application rates and timing.
- There is no difference in soil nutrient levels after 3 years of applications.
- When applying large amounts of any one nutrient, that nutrient very often will tie up or reduce the availability of other nutrients, by using a lower rate fertilizer nutrients stay in better balance with each other.